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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,107	09/24/2003	Norman Goris	N. GORIS 6-6	7170
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EXAMINER				
JACKSON, BLANE J				
ART UNIT		PAPER NUMBER		
2618				
NOTIFICATION DATE		DELIVERY MODE		
06/17/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/670,107

Applicant(s)

GORIS ET AL.

Examiner

Blane J. Jackson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 October 2007 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection. After further search of the prior art, Batkin et al. is introduced to teach a bio-monitor with sensors built into a mobile telephone.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen et al. (US 5,772,586) in view of Batkin et al. (US 2005/0239493).

As to claims 1 and 8, Heinonen teaches an apparatus and method of employing a mobile telephone to measure a vital sign comprising:

A vital sign measuring system having a vital sign sensor integrated within a chassis of said mobile telephone and configured to determine vital sign information of a user wherein at least a portion of said vital sign measuring system includes a series of computer program instruction adapted to be executed on a processor of said mobile telephone (figures 1-3, column 3, lines 18-64, measuring unit (11) placed *in the battery space, not separately attached*, of a mobile phone (1), the measuring unit with means for measuring blood glucose level, blood pressure, fever or pulse; column 4, line 54 to column 5, line 13, the measuring unit is connected to a communication bus of the phone's processor, *the phone software changed* such that the display and the keyboard of the phone may be used in the act of measurement),

A keypad coupled to the vital sign measuring system configured to allow a user to employ said series of instructions to control said vital sign information from said vital sign information (figure 2, column 5, lines 54-65, keypad (13) is used by user to browse

previous measurement results and inherently used in the act of measurement in conjunction with the display),

A display wherein said vital sign sensor is configured to send said vital sign information to said display, said display configured to receive said vital sign information from said vital sign sensor and provide said vital sign information to said user (figure 2, column 5, lines 54-65, the patient can browse previous measurement results, monitor their development and read procedural advice during the act of measurement via the display (12)).

Heinonen teaches the vital sign measuring system communicates and uses the functions of a mobile phone when placed in the battery space of the mobile phone, column 4, lines 54-67, but does not teach the vital sign measuring system having a vital sign sensor is fabricated within a chassis of the mobile phone.

Batkin teaches a bio monitor is built into a telephone handset where the sensors may be positioned on several surfaces of the telephone to establish contact with the user's hand or head, figures 1a, 1b, 1c and 3, paragraphs 0044, 0047-0050. Batkin discloses a bio monitor suitable for ECG as well as bio-sensors to monitor blood oxygen, pulse and ear temperature and support instant feedback to the patient or remote doctor via a telephonic transmission, paragraphs 0031-0033.

It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the vital sign measuring system within the mobile phone as taught by Batkin such that bio-signals are acquired from the same user posture as in ordinary telephonic use.

As to claims 2 and 9 with respect to claims 1 and 8, Heinonen teaches the mobile telephone wherein said vital sign sensor is a body temperature sensor (column 3, lines 56-64, means for measuring the blood glucose level, measuring blood pressure, pulse or fever (body temperature)).

As to claims 3 and 10 with respect to claims 1 and 8, Heinonen teaches the mobile telephone wherein said vital sign sensor is a blood pressure sensor (column 3, lines 56-64, means for measuring the blood glucose level, measuring blood pressure, pulse or fever (body temperature)).

As to claims 4 and 11 with respect to claims 1 and 8, Heinonen teaches the mobile telephone wherein said vital sign sensor is a pulse detector (column 3, lines 56-64, means for measuring the blood glucose level, measuring blood pressure, pulse or fever (body temperature)).

As to claim 5, Heinonen teaches the mobile telephone as recited in claim 1 wherein the vital sign sensor includes an analog to digital interface coupled to said display and configured to convert said vital sign information from analog data to digital data and directly send said digital data to said display to provide said vital sign information as digital data (figure 3, column 5, lines 21-65, electronic section (20) comprises an A/D converter and a memory where the vital sign information or levels are

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digitized and stored, the same information applied to the special program to guide the patient in the act of measurement with display).

As to claims 6, 13 and 18 with respect to claims 1 and 8 and 15, Batkin of Heinonen modified teaches a loudspeaker and a microphone coupled to the vital sign measuring system configured to provide said vital sign information to said user and configured to allow said user to control said vital sign measuring system respectively (paragraph 0054, health practitioner talks to the patient and to instruct the patient on when to begin and cease sending the bio-signal information).

As to claim 7 with respect to claim 1, Batkin of Heinonen modified teaches said series of instructions of said vital sign measurement system are integrated with instructions of said mobile telephone executing on said central processing unit (figures 3 and 6, paragraph 0049, Note for figure 6, the bio monitor system is shown external to the mobile phone for clarity, the circuit shown is solely dependent on the mobile phone CPU for control and data processing).

As to claim 12, Heinonen teaches the method as recited in claim 8 wherein said vital sign sensor is located on an opposite side of said mobile telephone as said display to simultaneously employ said vital sign sensor and provide said vital sign information to said user through said display (figure 2, column 4, line 54 to column 5, line 39, measuring unit (11) is placed in the battery space of the mobile phone, opposite side of

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the mobile phone to the display and column 5, lines 54-65; display to provide measurement advice, results, warnings and history).

As to claim 15, Heinonen teaches a mobile telephone comprising:

A vital sign measurement system including a body temperature sensor, a blood pressure sensor, a pulse detector and control circuitry coupled to said body temperature sensor, said blood pressure sensor and said pulse detector, said vital sign measurement system configured to determine vital sign information of a user (column 3, lines 56-64, a mobile telephone comprising a vital sign measuring unit (11) for, by example, measuring blood glucose level but may also comprise means to measure blood pressure, fever (body temperature) or pulse),

A processor unit shared by said mobile telephone and said vital sign measurement, configured to control said body temperature sensor, said blood pressure sensor and said pulse detector via said control circuitry when said vital sign measurement system is activated (figure 2, column 4, line 54 to column 5, line 65, the measuring unit is coupled to the phone communication bus with changes to the phone's software such that the measuring unit is interfaced to the user via the phone's display and keyboard), and

A display configured to receive said vital sign information from said vital sign measurement system and provide said vital sign information to said user (figure 2, column 5, lines 54 to 65, the patient can browse previous measurement results, monitor

their development and read procedural advice during the act of measurement via the display (12)).

Heinonen teaches the vital sign measuring system communicates and uses the functions of a mobile phone when placed in the battery space of the mobile phone, column 4, lines 54-67, but does not teach the vital sign measuring system is included within the mobile telephone during manufacturing thereof.

Batkin teaches a bio monitor is built into a telephone handset where the sensors may be positioned on several surfaces of the telephone to establish contact with the user's hand or head, paragraphs 0044, 0047-0050. Batkin discloses a bio monitor suitable for ECG as well as bio-sensors to monitor blood oxygen, pulse and ear temperature and support instant feedback to the patient or remote doctor via a telephonic transmission, paragraphs 0031-0033.

It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the vital sign measuring system within the mobile phone as taught by Batkin such that bio-signals are acquired from the same user posture as in ordinary telephonic use.

As to claim 16 with respect to claim 8, Batkin of Heinonen modified teaches operating said vital sign sensor is solely dependent on the central processing system (figures 3 and 6, paragraph 0049, Note for figure 6, the bio monitor system is shown external to the mobile phone for clarity, the circuit shown is solely dependent on the mobile phone CPU for control and data processing).

As to claim 17 with respect to claim 15, Heinonen teaches the mobile telephone wherein said vital sign measurement system includes a series of computer program instructions adapted to be executed on said processor to control said body temperature sensor, said blood pressure sensor and said pulse detector via said control circuitry (figure 3, column 4, line 63 to column 5, line 65, the phone software is changed to share the phone processor, display, keyboard and transmission circuits with the measuring unit).

As to claim 19, Heinonen teaches the mobile telephone as recited in claim 15 wherein said vital sign measurement system is activated by a keypad of said mobile telephone (figure 2, column 4, line 63 to column 5, line 3 and column 5, lines 54-65, keyboard (13) and display (12) are used in the act of measurement).

As to claim 20, Heinonen teaches the mobile telephone as recited in claim 15 wherein said vital sign information is provided to said user via an analog signal indicated on said display (column 5, lines 54-65, user can browse previous or current measurement results on the display).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heinonen et al. (US 5,772,586) and Batkin et al. (US 2005/0239493) in view of Puthuff (US 6,112,103).

As to claim 14 with respect to claim 8, Batkin of Heinonen modified teaches a conventional mobile telephone equipped with a microphone and loudspeaker employed in conversation with a remote practitioner to control and review the bio monitor, paragraph 0054, but does not specifically teach controlling the vital sign measuring system (directly) with a microphone of said mobile telephone.

Puthuff teaches a mobile telephone (figure 1, telephone (312)) with an attached personal communication node (PCN) (100) for the user to answer calls, initiate calls, receive or send messages by issuing voice commands, column 3, lines 8-23. Puthuff also teaches the PCN in combination with the cellular telephone includes software which interprets voice commands from the user such as to direct the cellular telephone to perform a certain function or direct a particular control function on a particular remote device, column 6, lines 10-46.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the vital health monitoring telephone of Heinonen modified with the voice command ability of Puthuff for the hands free convenience of controlling the system by the patient.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blane J. Jackson whose telephone number is (571) 272-7890. The examiner can normally be reached on Monday through Thursday, 8:30 AM-7:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Blane J Jackson/
Primary Examiner, Art Unit 2618